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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,763	02/27/2002	Lawrence G. Roberts	22134-06741	1332

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EXAMINER	
TON, DANG T	
ART UNIT	**PAPER NUMBER**
2666	

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/086,763	ROBERTS, LAWRENCE G.	
	Examiner	Art Unit	
	DANG T. TON	2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-20,22-24,26-35,37-51 and 53-58* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-20,22-24,26-35,37-51, and 53-58* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3,5-20,22-24,26-35,37-51, and 53-58 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-54 of U.S. Patent No. 6,574,195. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following formalities:

For Claims 1-3,5-20,22-24,26-35,37-51, and 53-58, the claims 1-54 of U.S. Patent No. 6,574,195 disclose a system/method comprising :

receiving at a network hop a first data packet; establishing the first data packet as corresponding to a given micro flow; extracting a set of quality of service characteristics from the first data packet and retaining the set of quality of service characteristics in association with the given micro flow; receiving a second data packet; determining whether the second data packet corresponds to the given micro flow; and automatically associating the set of quality of service characteristics to the second data packet where it is determined that the second data packet corresponds to the given micro flow;

wherein determining whether the second data packet corresponds to the given micro flow includes examining a set of identifying information found in the second data packet;

further comprising: maintaining a flow block that stores the set of quality of service characteristics;

wherein the flow block is maintained in a flow block table that associates the set of quality of service characteristics to packets in the given micro flow;

wherein network layer and transport layer information are retrieved from data packets and used to correlate them to the given micro flow;

wherein a hash key is generated from the network layer and transport layer information, and the hash key is used to identify the flow block in the flow block table;

wherein the set of quality of service characteristics includes a transmission rate constraint;

wherein the set of quality of service characteristics includes a delay variation constraint;

wherein the transmission rate constraint is compared to a determined rate for packets in the given micro flow, and wherein the second data packet is discarded where the determined rate for the second data packet exceeds the transmission rate constraint;

wherein the determined rate is derived from an arrival rate for packets in the given micro flow into a switch corresponding to the network hop;

further comprising: using the set of quality of service characteristics to selectively apply a queuing technique to the given micro flow to adjust the transmission rate of the given micro flow;

wherein the queuing technique includes weighted fair queuing;

further comprising: retrieving path information for the given micro flow prior to comparing the determined rate to the transmission rate constraint;

further comprising: after the first data packet is received at the network hop, identifying a next network hop by determining whether a candidate network hop can accommodate transmission of packets in the given micro flow according to the set of quality of service characteristics;

wherein the first data packet and the second data packet are IP packets;

wherein the first data packet and the second data packet are deencapsulated after they are received from a trunk line;

further comprising: extracting policy information from the first data packet; and adjusting the value of at least one of the set of quality of service characteristics based upon the extracted policy information;

wherein extracting the set of quality of service characteristics comprises extracting layer information from the first data packet, and determining the set of quality of service characteristics from stored information relating quality of service characteristics to layer information;

an interface, configured to receive at a network hop a first data packet and a second data packet; a micro flow classifier, in operative communication with the interface, configured to establish the first data packet as corresponding to a given micro flow, extract a set of quality of service characteristics from the first data packet; and a micro flow recognizer, in operative communication with the interface and the micro flow classifier, configured to retain the set of quality of service characteristics in association with the given micro flow,
determine whether the second data packet corresponds to the given micro flow, and automatically associate the set of quality of service characteristics to the second data packet where it is determined that the second data packet corresponds to the given micro flow;

wherein the micro flow recognizer determines whether the second data packet corresponds to the given micro flow by examining a set of information found in the second data packet;

further comprising: a flow block table, in operative communication with the micro flow recognizer, configured to maintain a flow block that stores the set of quality of service characteristics;

wherein the flow block table associates the set of quality of service characteristics to packets in the given micro flow;

wherein network layer and transport layer information are retrieved from data packets and used to correlate them to the given micro flow;

wherein a hash key is generated from the network layer and transport layer information, and the hash key is used to identify the flow block in the flow block table;

wherein the set of quality of service characteristics includes a transmission rate constraint;

wherein the set of quality of service characteristics includes a delay variation constraint;

further comprising: a policing scheduler, configured to discard the second data packet where the determined rate for the second data packet exceeds the transmission rate constraint;

wherein the determined rate is derived from an arrival rate for packets in the given micro flow into a switch corresponding to the network hop;

wherein the set of quality of service characteristics are used to selectively apply a queuing technique to the given micro flow to adjust the transmission rate of the given micro flow;

wherein the queuing technique includes weighted fair queuing;

wherein path information for the given micro flow is retrieved prior to comparing the determined rate to the transmission rate constraint;

further comprising: an egress micro flow manager, configured to identify a next network hop by determining whether a candidate network hop can accommodate transmission of packets in the given micro flow according to the set of quality of service characteristics;

wherein the first data packet and the second data packet are IP packets;

wherein the first data packet and the second data packet are deencapsulated after they are received from a trunk line;

wherein the micro flow classifier extracts policy information from the first data packet, and adjusts the value of at least one of the set of quality of service characteristics based upon the extracted policy information;

wherein extracting the set of quality of service characteristics comprises extracting layer information from the first data packet, and determining the set of quality of service characteristics from stored information relating quality of service characteristics to layer information;

means for receiving at a network hop a first data packet and a second data packet; means for establishing the first data packet as corresponding to a given micro flow and extracting a set of quality of service characteristics from the first data packet; and means for determining whether the second data packet corresponds to the given micro flow by retaining the set of quality of service characteristics in association with the given micro flow, and automatically associating the set of quality of service characteristics to the second data packet where it is determined that the second data packet corresponds to the given micro flow;

wherein the means for determining determines whether the second data packet corresponds to the given micro flow by examining a set of identifying information found in the second data packet;

further comprising: a flow block table, for maintaining a flow block that stores the set of quality of service characteristics;

wherein the flow block table associates the set of quality of service characteristics to packets in the given micro flow;

wherein network layer and transport layer information are retrieved from data packets and used to correlate them to the given micro flow;

wherein a hash key is generated from the network layer and transport layer information, and the hash key is used to identify the flow block in the flow block table;

wherein the set of quality of service characteristics includes a transmission rate constraint;

wherein the set of quality of service characteristics includes a delay variation constraint;

further comprising: means for discarding the second data packet where the determined rate for the second data packet exceeds the transmission rate constraint;

wherein the determined rate is derived from an arrival rate for packets in the given micro flow into a switch corresponding to the network hop;

wherein the set of quality of service characteristics are used to selectively apply a queuing technique to the given micro flow to adjust the transmission rate of the given micro flow;

wherein the queuing technique includes weighted fair queuing;

wherein path information for the given micro flow is retrieved prior to comparing the determined rate to the transmission rate constraint;

further comprising: means for determining whether a candidate network hop can accommodate transmission of packets in the given micro flow according to the set of quality of service characteristics;

wherein the first data packet and the second data packet are IP packets.

wherein the first data packet and the second data packet are deencapsulated after they are receive from a trunk line;

wherein the means for establishing extracts policy information from the first data packet, and adjusts the value of at least one of the set of quality of service characteristics based upon the extracted policy information; and

wherein extracting the set of quality of service characteristics comprises extracting layer information from the first data packet, and determining the set of quality of service characteristics from stored information relating quality of service characteristics to layer information.

NOTE : SEE CLAIMS 1-54 OF of U.S. Patent No. 6,574,195.

Applicant's claims 1-3,5-20,22-24,26-35,37-51, and 53-58, merely broaden the scope of the claims 1-54 of U.S. Patent No. 6,574,195 by eliminating the terms "automatically associating the set of quality of service characteristics to the second data packet where it is determined that the second data packet corresponds to the given micro flow " from claims 1,19,and 37 of the patent. It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. In re karlson, 136 USPQ 184 (CCPA). Also note Ex Parte Raine, 168 USPQ 375 (bd. App. 1969); omission of a reference element whose function is not need would be obvious to one skilled in the art.

2. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANG T. TON whose telephone number is 571-272-3171. The examiner can normally be reached on MON-WED, 5:30 AM-6:00 PM and Thur 5:30-9:30 A.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RAO SEEMA can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. Ton

DANG TON
PRIMARY EXAMINER